

PATENT CLAIMS

1. A control device for displacing at least one machine axis of a machine tool or production machine, wherein the control device has a control element (2), which can be deflected from a rest position, wherein set values (X_{set}) for an open loop controller (9) or a closed loop controller of the machine can be generated depending on the magnitude and duration of the deflection (1), wherein during a deflection process of the control element (2) and in the steady state of the deflection of the control element (2) a pulse-shaped mechanical feedback can be fed back to an operator for at least one change in the set value generated by means of the control element (2).
2. The control device as claimed in claim 1, characterized in that the set values (X_{set}) are provided in the form of position set values or speed set values.
3. The control device as claimed in one of the preceding claims, characterized in that the control device is designed in the form of a joystick (20), a joy-wheel (21) or a computer mouse (24).
4. The control device as claimed in one of the preceding claims, characterized in that the speed of the change of the set values (X_{set}) increases disproportionately with the magnitude of the deflection (1) when a certain deflection (1) is exceeded.
5. The control device as claimed in one of the preceding claims, characterized in that the pulse-like mechanical feedback can be generated electromagnetically.
6. The control device as claimed in one of the preceding claims, characterized in that the control device can be represented on a monitor screen (18) in the form of a corresponding virtual handwheel (17).

7. The control device as claimed in one of the preceding claims, characterized in that, in the steady state of the deflection of the control element (2), a pulse-shaped mechanical feedback can be fed back to an operator via the control element (2) for each generated change in the set value.